

We claim:

1. A Master cylinder for a motor vehicle braking system, comprising
  - a master cylinder (1) body (2) made of non-magnetic material,
  - a bore (3) formed in the body of the master cylinder,
  - 5 - a variable-volume pressure chamber (5) inside the bore,
  - a piston (4) sliding in the bore and varying the volume of the pressure chamber,
  - a detection device (9) detecting actuation of the braking system, fixed to the body of the master cylinder, facing a passage of the piston, the
  - 10 detection device being equipped with at least one magnetic circuit (9) that can be opened or closed by a magnetic piece (19), characterized in that the magnetic circuit comprises at least two pole pieces (10, 11), a magnet (12) and a magnetically sensitive element (13).
2. The master cylinder according to claim 1, characterized in that the
- 15 magnetic piece is a ring (19) and in that, when the master cylinder is in the rest position, the magnetic circuit is closed.
3. The master cylinder according to claim 1, characterized in that the magnetic piece is a sleeve tube (19) the length of which is roughly equal to a working stroke of the piston, and in that when the master cylinder is in the
- 20 rest position, the magnetic circuit is open.
4. The master cylinder according to claim 3, characterized in that the magnetic circuit is equipped with two pole pieces (10, 11) forming air gaps, on the one hand, at the location of the magnet and at the location of the magnetically sensitive element and, on the other hand, at the location of the
- 25 moving piece.
5. The master cylinder according to claim 4, characterized in that the magnetic circuit is equipped with three pole pieces (21, 22, 23) approximately forming a U and two pole pieces (21 and 22) forming two branches of the U and one pole piece (23) forming the base of the U, an air gap being formed at
- 30 the location of the magnet, another air gap being formed at the location of the magnetically sensitive element, and a third air gap being formed at the location of the moving piece.
6. The master cylinder according to claim 5, characterized in that the magnetically sensitive element is a magnetic-field-variation sensor of the Hall
- 35 cell or magneto-resistive type.

7. The master cylinder according to claim 5, characterized in that the magnetically sensitive element is a magnetic-field-variation sensor of the reed switch type.

5 8. The master cylinder according to claim 7, characterized in that the said detection device comprises a first magnetic circuit and a second magnetic circuit, the first circuit being equipped with a magnet and the second magnetic circuit being equipped with a circuit of the reed switch type, so that when the piston is at rest, a magnetic flux that may flow through the second magnetic circuit is not enough to activate the reed switch circuit.

10 9. The master cylinder according to claim 8, characterized in that the said first magnetic circuit is formed of two pole pieces (29 and 30), a magnet (32) being housed in the first magnetic circuit, said second magnetic circuit being formed by the first pole piece (29) and a third pole piece (31).

15 10. The master cylinder according to claim 9, characterized in that an air gap (26) is formed between the pole piece (29) and a moving magnetic piece carried by a piston (34) of the master cylinder, a second air gap (27) is formed between the pole piece (30) and the moving piece, a fourth air gap (24) is formed between the pole piece (29) and the pole piece (31) and a third air gap (25) is formed between the pole piece (31) and the moving  
20 piece.

11. The master cylinder according to claim 10, characterized in that a sum of the first and second air gaps (26 and 27) is less than a sum of the first, second and third air gaps (24, 25 and 26).

25 12. The master cylinder according to claim 11, characterized in that the pole pieces (29, 30 and 31) are mutually parallel and are perpendicular to a forward travel of the piston (34).

13. The master cylinder according to claim 12, characterized in that the pole pieces and the moving element are made of ferromagnetic materials.